



# Fae I

Recognition Sequence:

For more details

scen the code

S E495
50 units
1,000 u/ml

CATG↓ †GTAC

Exp:

Store at -20°C

 SE-Buffers
 B
 G
 O
 W
 Y
 ROSE

 %Activity
 25-50
 50-75
 10-25
 10-25
 75-100
 100

37°C 65°C Fae I pUC19

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**BSA** 

# **CERTIFICATE OF ANALYSIS**

Source: Flavobacterium aquatile N3.

## Supplied in:

10 mM Tris-HCl (pH 7.5), 50 mM KCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 200 μg/ml BSA, 50% glycerol.

#### **Reaction Conditions:**

1X SE-Buffer Fae I, BSA (100 $\mu g/ml$ ). Incubate at 37° C.

<u>1X SE-Buffer Fae I (pH 8.3 @ 25° C)</u>:

33 mM Tris-Ac 66 mM KAc 10 mM MgAc 1 mM DTT

#### **Heat Inactivation:**

Enzyme is inactivated by incubation at 65°C for 20 minutes.

<u>Unit Definition</u>:One unit is defined as the amount of enzyme required to digest 1  $\mu$ g of pUC19 DNA in 1 hour at 37°C in a total reaction volume of 50  $\mu$ l. To obtain 100% activity, BSA should be added the 1x reaction mix to a final concentration of 100  $\mu$ g/ml.

#### **Quality Control Assays**

<u>Ligation</u>:After 3-fold overdigestion with Fae I, 90% of the DNA fragments can be ligated with T4 DNA Ligase and recut.

16-Hour Incubation: A 50 μl reaction containing 1 μg of DNA and 2 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

Do not use BSA for long incubation.

Oligonucleotide Assay:No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 1 units of restriction endonuclease for 3 hours.

### **Enzyme Properties:**

When using a buffer other than the optimal (Supplied) SE-Buffer, it may be necessary to add more enzymes to achieve complete digestion.

Reagents Supplied with Enzyme: 10X SE Buffer Fae I, BSA (10mg/ml).

Blocked by C"ATG methylation.